Extracts of Habitats Regulation Assessments

Extracts from the HRAs for the Local Plans for **Epping Forest DC** and **Havant BC** are provided by the RHS to the ExA in response to Written Question Q4.4.9 at Deadline 10.

They are highlighted to show key references to the inclusion of ammonia from road traffic.

EB209

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Habitats Regulations Assessment of Epping Forest District Council Local Plan

Epping Forest District Council

January 2019

Quality information

Prepared by	Checked by	Verified by	Approved by
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Revision History

Revision	Revision date	Details	Authorized	Name	Position
3	21/01/19	Updates for recreation and air quality	JR	James Riley	Technical Director

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1. Introduction

Background to the Project

1.1 AECOM was appointed by Epping Forest District Council to assist the Council in undertaking a Habitat Regulations Assessment of its Local Plan (hereafter referred to as the 'Plan' or 'Local Plan'). The Plan being assessed is the Submission Version of the Local Plan 2017 which sets out the Council's proposed strategy to meet the economic and housing needs in the District up to 2033. The Plan identifies sites for housing (including traveller accommodation) and employment. It also sets out development management policies and infrastructure requirements. The objective of this assessment is to identify any aspects of the Plan that would cause an adverse effect on the integrity of Natura 2000 sites, otherwise known as European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and, as a matter of Government policy, Ramsar sites), either in isolation or in combination with other plans and projects, and to advise on appropriate policy mechanisms for delivering mitigation where such effects were identified.

1.2 An assessment of housing need across the East Herts and West Essex Housing Market Area (HMA) was undertaken, which was then used as the basis for developing the Local Plan. The HMA covers Epping Forest District Council, Harlow Council, East Herts District Council and Uttlesford District Council. The HMA developed a series of different Options for quanta and distribution of housing in each of the Authority boundaries, focussed on growth within the wider Harlow area.

1.3 The HRA report accompanying the submitted Local Plan was complete based on legal precedent and traffic and air quality modelling results as they stood at the time. Since that time however additional case law has clarified that consideration of mitigation measures must be deferred to the appropriate assessment stage of the HRA process, Natural England confirmed that they considered that an appropriate assessment was necessary and in particular there has been extensively updated traffic and air quality modelling undertaken for Epping Forest SAC, following a methodology agreed with Natural England. As a result it is appropriate to produce this January 2019 HRA report including appropriate assessment. Since the amendments to create this report are extensive (with regard to creating an appropriate assessment and comprehensively updating the air quality work for Epping Forest SAC) this January 2019 HRA entirely replaces the HRA that was submitted with the Local Plan.

Legislation

1.4 The need for Appropriate Assessment is set out within Article 6 of the EC Habitats Directive 1992, and interpreted into British law by the Conservation of Habitats and Species Regulations 2017 (as amended)[1]. The ultimate aim of the Directive is to "*maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest*" (Habitats Directive, Article 2(2)). This aim relates to habitats and species, not the European sites themselves, although the sites have a significant role in delivering favourable conservation status.

1.5 The Habitats Directive applies the precautionary principle to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. Plans and projects with predicted adverse impacts on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

1.6 In order to ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the plan or project in question:

[1] Various amendments to the Regulations were published in late 2018 but these do not change the HRA process for Local Plans or the legal tests which must be met

Brentwood	7,240 (to 2033) [14]
Havering	17,550 (2016 - 2031) [15]
Redbridge	16,845 (2015-2030)[16]
Waltham Forest	10,320 (2012 - 2026)[17]
Enfield	13,480 (to 2030)[18]

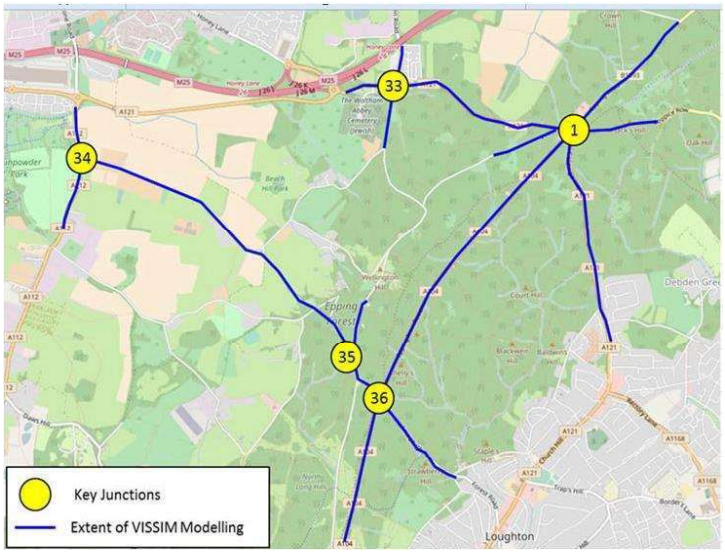
2.14 The Minerals and Waste Development Plans for Hertfordshire, Essex, London and Cambridgeshire are also of some relevance, since these may contribute to increased vehicle movements on the road network within Epping (and thereby contribute to air quality impacts). The, Essex, Hertfordshire and Cambridgeshire Local Transport Plans to 2031 will also be important in terms of encouraging sustainable transport. However, the major contributor to any in combination effect is likely to be that of housing and commercial development within the surrounding districts as set out in Local Plans and these have therefore been the main focus of cumulative 'in combination' effects with regard to this HRA.

2.15 In relation to recreational activity, the following documents have been consulted for their plans and projects that may affect European sites in combination with development in Epping Forest District: Lee Valley Regional Park Authority Site Management Plan and Epping Forest Management Plan and visitor surveys.

Air Quality Impact Assessment

2.16 To support this HRA, traffic modelling and an air quality impact assessment was undertaken in 2018/19 using a modified form of the Design Manual for Roads and Bridges (DMRB) methodology[19], the primary modification being the inclusion of ammonia emissions from traffic which is not part of the standard DMRB methodology. The technical notes explaining the traffic and air quality modelling methodology are contained within Appendices C and D.

2.17 The predicted change in vehicle flows and mean maximum queue length and duration as a result of all expected growth over the plan period (i.e. the development Options identified within the HMA, background traffic growth arising from development in surrounding authorities and delivery of existing planning permissions within the HMA authorities) were modelled on a series of roads within 200m of Epping Forest SAC. The roads were selected as being those most likely to experience the greatest change in flows (and therefore impact) due to housing and employment growth in the East Herts/West Essex Housing Market Area. The modelled network is shown below.



[13] https://www.chelmsford.gov.uk/planning-and-building-control/planning-policy-and-new-local-plan/new-local-plan/developing-the-new-local-plan/?entryid1139=67198 [accessed 31/10/2017]
[14] https://brentwood.jdi-consult.net/localplan/readdoc.php?docid=8&chapter=5&docelemid=d1160#d1160 [accessed 31/10/2017]
[15] http://havering.objective.co.uk/file/4645335 [accessed 31/10/2017]
[16] https://www.redbridge.gov.uk/media/2268/final-web-pdf_redbridge-local-plan_reduced.pdf [accessed 31/10/2017]
[17] https://branding.walthamforest.gov.uk/Documents/adopted-core-strategy.pdf [accessed 31/10/2017]
[18] https://new.enfield.gov.uk/services/planning/planning-policy/local-plan/planning-policy-information-enfield-core-strategy.pdf [accessed 31/10/2017]
[19] Design Manual for Roads and Bridges, Volume 11, Section 3 Part 1 (HA207/07) and subsequent Interim Advice Notes

Air Quality Habitat Regulations Assessment for Havant Borough Local Plan 2036

Report for Havant Borough Council

ED 11925100 | Issue Number 3 | Date 21/01/2019

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Ref: ED11925100- Issue Number 3

Executive Summary

The Borough of Havant is located in South Hampshire. There are approximately 125,000 people living within the Havant Borough area of 55 km^2. The emerging Havant Borough Local Plan (HBLP) 2036 sets the framework for future housing and employment development in Havant Borough. The HBLP envisages the provision of at least 9,260 new homes and 82,780 square metres of new employment and commercial floorspace in the 20-year period 2016 to 2036. This represents a significant increase in population, and associated increases in road traffic may have the potential for significant effects on air quality both within Havant Borough and in surrounding areas.

Havant Borough includes numerous nature conservation areas of national and international significance. These sites may be adversely affected by increases in air concentrations of pollutants, particularly oxides of nitrogen and ammonia, and the deposition of these pollutants within the habitats.

This report contains the results of an Air Quality Habitat Regulations Assessment (HRA) of road traffic emissions associated with the proposed development within Havant Borough. The HRA forms part of the robust evidence base supporting Havant Borough Council (HBC) in connection with their emerging Havant Borough Local Plan 2016-2036 (HBLP). The HBLP study area contains the designated sites with European (or equivalent international) designation, namely Ramsar sites, Special Areas of Conservation (SACs), and Special Protection Areas (SPAs) within a 10 km buffer area around Havant Borough.

For all European-designated sites contained in the study area, a sub-regional air dispersion model (RapidAir) was used to model predicted air quality impacts at a resolution of 3m x 3m. Traffic growth within the study area was provided by Solent Transport's Sub-Regional Transport Model (SRTM)[1]. Three traffic scenarios were modelled for the purposes of this study, in order to assess the potential air quality impacts of the HBLP:

- Havant 2015 Reference (Havant Ref): This model was designed to replicate 2015 traffic conditions within Havant. It was used to verify the performance of the air dispersion model.
- Havant 2036 Baseline (Havant BL): This model represents a scenario including all known current (as of 2017) completed development and infrastructure within Havant, in addition to all committed development and infrastructure up to 2036. This is a hypothetical scenario against which to test the impacts of the HBLP, as it assumes the unlikely scenario that there will be no development within Havant up to 2036, other than at sites which already have planning permission.
- Havant 2036 Do Minimum (Havant DM): This model represents a scenario which includes the HBLP housing and employment development but assumes there will be no further improvements to the transport network, aside from those which are already committed and therefore already included in the Havant 2036 BL scenario. Development growth outside Havant is identical to that included in the 2036 BL scenario.

Additionally, in order to assist with an assessment of in-combination effects arising from emerging local plans in neighbouring authorities, dispersion model results from two SRTM scenarios covering the larger PUSH sub-region and presented in a previous report[2] were included in this study:

- PUSH 2034 Baseline (PUSH BL): This model was designed to represent a future scenario without the proposed PUSH development, and it has all land use growth inputs removed from the PUSH sub-region from 2014 onwards.

[1] Systra and Solent Transport, "Havant Borough Local Plan – SRTM Modelling", November 2018.

[2] Ricardo Energy & Environment, "Partnership for Urban South Hampshire: Air Quality Impact Assessment", Issue 3, September 2018.

- PUSH 2034 Do Minimum (PUSH DM): This model scenario includes development and growth within the PUSH region, equating to approximately 100,000 additional dwellings compared to the 2034 Baseline scenario. It includes transport schemes that are already committed as well as several supporting schemes that are vital to committed development sites even though the schemes themselves may not yet be committed. This scenario includes development in Havant on the scale of that included in the HBLP, and represents a precautionary approach to the assessment of in-combination air quality impacts associated with development across the PUSH sub-region.

Air quality impacts on designated sites were assessed based on predicted annual average airborne concentrations of oxides of nitrogen (NOx) and ammonia (NH_3), as well as annual deposition of nutrient nitrogen and acid. Predicted pollutant contributions associated with the proposed development in the Havant DM (for consideration of the HBLP in isolation) and in the PUSH DM (for consideration of the HBLP in-combination) scenarios were compared to pollutant screening thresholds. Where the screening analysis indicated that Likely Significant Effects (LSEs) on a designated site could not be ruled out, further analysis was undertaken in the form of an HRA Stage 2 Appropriate Assessment.

This Air Quality HRA indicates that, pre-mitigation, there will be no threat to the ability of these European sites to achieve their conservation objectives or maintain their integrity as a result of the Havant Borough Local Plan (either alone or in combination).

- Butser Hill SAC
- Chichester and Langstone Harbours Ramsar & SPA
- Kingley Vale SAC
- Pagham Harbour Ramsar & SPA
- Portsmouth Harbour Ramsar & SPA
- Solent and Dorset Coast potential SPA
- Solent and Isle of Wight Lagoons SAC
- Solent and Southampton Water Ramsar & SPA

The emerging HBLP has the potential, pre-mitigation, to result in adverse air quality impacts for one European designated site:

- Solent Maritime SAC

In order to address the potential adverse effect of nitrogen deposition at Solent Maritime SAC, it is advocated that a joint Nitrogen Action Plan is developed with Portsmouth City Council and potentially other neighbouring authorities. Whilst the exact details of a joint Nitrogen Action Plan would need to be determined and agreed with partners (neighbouring authorities), the mitigation contained therein should be targeted, effective, deliverable and be committed to by applicable parties so as to ensure no adverse effect on the integrity of the Solent Maritime SAC. With the application of the mitigation advocated above, adverse effects on the qualifying features of the Solent Maritime SAC can be prevented and as such there will be no threat to the ability of the European site to achieve its conservation objectives or maintain its integrity as a result of the Havant Borough Local Plan (either alone or in combination).

1 Introduction

The Borough of Havant is located in South Hampshire, and is adjacent to Chichester, East Hampshire, Winchester and the City of Portsmouth. There are approximately 125,000 people living within the Havant Borough area of 55 km^2. The HBLP envisages the provision of at least 9,260 new homes and 82,780 square metres of new employment and commercial floorspace in the 20-year period 2016 to 2036, and is in line with the Government's objectively assessed need for housing. This represents a significant increase in population, and associated increases in road traffic may have the potential for significant effects on air quality both within Havant Borough and in surrounding areas.

Being bordered by coasts and the Solent to the south, and located near South Downs National Park to the north, the area surrounding Havant Borough includes numerous nature conservation areas of national and international significance. These sites may be adversely affected by increases in air concentrations of pollutants, particularly oxides of nitrogen and ammonia, and the deposition of these pollutants within the habitats.

This report contains the results of an Air Quality Habitat Regulations Assessment (HRA) of road traffic emissions associated with the proposed development within Havant Borough. The HRA forms part of the robust evidence base supporting Havant Borough Council (HBC) in connection with their emerging Havant Borough Local Plan 2016-2036 (HBLP). The HBLP study area contains the designated sites with European (or equivalent international) designation, namely Ramsar sites, Special Areas of Conservation (SACs), and Special Protection Areas (SPAs) within a 10 km buffer area around Havant Borough.

For all European-designated sites contained in the study area, a sub-regional air dispersion model (RapidAir) was used to model predicted air quality impacts at locations within the site as well as within a 500m buffer zone of the site, at a resolution of 3m x 3m. Traffic growth within the study area was provided by Solent Transport's Sub-Regional Transport Model (SRTM)[3]. Three traffic scenarios were modelled for the purposes of this study, in order to assess the potential air quality impacts of the HBLP:

- Havant 2015 Reference (Havant Ref): This model was designed to replicate 2015 traffic conditions within Havant. It was used to verify the performance of the air dispersion model.
- Havant 2036 Baseline (Havant BL): This model represents a scenario including all known current (as of 2017) completed development and infrastructure within Havant, in addition to all committed development and infrastructure up to 2036. Development associated with the HBLP is not included in this scenario. This is a hypothetical scenario against which to test the impacts of the HBLP, as it assumes the unlikely scenario that there will be no development within Havant up to 2036, other than at sites which already have planning permission. Outside of Havant, development growth is assumed to continue as 'normal' and in accordance with adopted Local Plans (or equivalent) of respective neighbouring Boroughs, in accordance with TEMPRO v7.2 growth projections.
- Havant 2036 Do Minimum (Havant DM): This model represents a scenario which includes the HBLP housing and employment development but assumes there will be no further improvements to the transport network, aside from those which are already committed and therefore already included in the Havant 2036 BL scenario. Development growth outside Havant is identical to that included in the 2036 BL scenario.

[3] Systra and Solent Transport, "Havant Borough Local Plan – SRTM Modelling", November 2018.